AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An image processing apparatus, comprising:

a first sensor having a plurality of reading elements arranged in a primary scanning direction;

a second sensor having a plurality of reading elements arranged in the primary scanning direction, the second sensor being disposed a predetermined number of lines apart from the first sensor in a secondary scanning direction;

an integral correction portion for correcting a data output time difference due to a position difference between the first and the second sensors by an amount corresponding to an integral number of line units; and

a fractional correction portion for correcting the data output time difference due to the position difference between the first and the second sensors by an amount corresponding to less than one line unit;

a black fine line detection portion for detecting a black fine line included in image data,

wherein the fractional correction portion is enabled if a width of the black fine line is greater than a predetermined value, and

wherein the fractional correction portion is disabled if the width of the black fine line is equal to or less than the predetermined value on the basis of an output signal of the black fine line detection portion.

2. (Previously Presented) The image processing apparatus according to claim 1, further comprising:

a control portion for enabling the fractional correction portion when a fraction is generated adding to integral lines of output time difference between the data from the first sensor and the data from the second sensor after changing a scaling ratio of an original image, wherein the change in the scaling ratio causes a change in the relative speed of the original image to the first and the second sensors.

3. (Previously Presented) The image processing apparatus according to claim 2, further comprising a third sensor having a plurality of reading elements arranged in the primary scanning direction, the third sensor being disposed a predetermined number of lines apart from the first sensor in the secondary scanning direction.

4. (Original) The image processing apparatus according to claim 3, wherein the first, the second and the third sensors read red, green and blue components of an original image, respectively.

5. (Original) The image processing apparatus according to claim 4, wherein the first, the second and the third sensors make up a contraction type color CCD sensor.

Claim 6 (Cancelled).

7. (Previously Presented) An image processing apparatus, comprising:

a sensor disposed linearly in a primary scanning direction, the sensor reading an image that has been decomposed into plural colors;

an optical system for projecting light from the image onto the sensor; and

a correction portion for correcting a misregistration of the colors in the primary scanning direction due to a chromatic aberration of the optical system, the correction portion performing a misregistration correction for each of plural areas divided in the primary scanning direction.

8. (Previously Presented) The image processing apparatus according to claim 7, wherein the sensor includes line sensors for red, green and blue colors arranged by a predetermined pitch in a secondary scanning direction.

9. (Previously Presented) The image processing apparatus according to claim 7, wherein a predetermined test image is read according to a characteristic of a machine coupled to the image processing apparatus and wherein information for the correction for each area is obtained from the image data.

10. (Previously Presented) The image processing apparatus according to claim 9, wherein the test image is a ladder chart in which black lines are arranged by a predetermined pitch in the primary scanning direction, a position shift among barycenters of the obtained red, green and blue image data is calculated, and boundaries of the areas and correction coefficients for the areas are obtained as

information for correction for each area in accordance with a distribution of the position shift among the barycenters of the red, green and blue image data in the primary scanning direction.

11. (Currently Amended) An image processing apparatus for performing a correction process of color image data obtained by an image sensor having a structure in which a plurality of element arrays are arranged longitudinally in a primary scanning direction in parallel and separated by a predetermined pitch in a secondary scanning direction, the apparatus comprising:

a plurality of interline correction portions, wherein each of the interline correction portions uses a ~~that use~~ different reference color ~~colors~~ for correcting a misregistration among the element arrays of the image sensor in the secondary scanning direction and each of the interline correction portions produces plural sets of image data; and

a correction output portion for outputting image data corrected in accordance with image data output by the plural interline correction portions.

12. (Currently Amended) An image processing apparatus for performing a correction process of red, green and blue image data obtained by an image sensor including red, green and blue element arrays arranged longitudinally in a primary scanning direction in parallel and separated by a predetermined pitch in a secondary scanning direction, the apparatus comprising:

a plurality of interline correction portions for correcting a misregistration among the red, green and blue element arrays of the image sensor in the secondary

scanning direction, each interline correction portion using one of red, green and blue colors as a reference color for correction and each of the interline correction portions produces plural sets of image data; and

a correction output portion for outputting an average of image data for each color output by the plural interline correction portions, as corrected image data.

13. (Currently Amended) A color image processing apparatus, comprising;

a fine line decision portion for deciding whether the present pixel is on a fine line or not for plural image data having different wavelength components read by an image reading device;

a density correction portion for performing correction by increasing a density of image data of at least one ~~the corresponding~~ wavelength component among image data of plural wavelength components that constitute [[in]] a present pixel when the present pixel is on a fine line on the basis of a signal from the fine line decision portion so as to reduce a difference between densities of image data of the plural wavelength components that constitute the present pixel; and

a chroma decision portion for deciding whether the present pixel has a chromatic color or an achromatic color using an output value of the density correction portion.

14. (Original) The color image processing apparatus according to claim 13, wherein the fine line decision portion detects one- or two-dot width fine lines with a high density.

15. (Original) The color image processing apparatus according to claim 13, further comprising a print image data generation portion for generating image data for printing using the output value of the density correction portion.

16. (Previously Presented) The color image processing apparatus according to claim 13, wherein the density correction portion performs correction by increasing a density of image data of wavelength components except for a wavelength component having best modulation transfer function (MTF) characteristics.

17. (Previously Presented) The color image processing apparatus according to claim 13, wherein:

a sensor included in the image reading device has a plurality of element arrays corresponding to different wavelength components, the plural element arrays being disposed separate from one another in a secondary scanning direction different from a primary scanning direction,

an interline correction portion is provided for correcting a phase shift among image data of the different wavelength components due to a misregistration among the plural element arrays,

the density correction portion performs correction by increasing a density of image data of a first wavelength component, and

the interline correction portion performs correction by processing image data of the first wavelength component by an interpolation process.

18. (Previously Presented) The color image processing apparatus according to claim 13, wherein the density correction portion performs correction by applying a first density correction quantity in a case where the fine line decision portion decides that the present pixel is on a fine line for each of image data of all wavelength components, and by applying a second density correction quantity in a case where the fine line decision portion decides that the present pixel is on a fine line only for a part of the wavelength components, the second density correction quantity being set to a value less than the first density correction quantity.

19. (Previously Presented) The color image processing apparatus according to claim 17,

wherein the density correction portion performs correction by increasing a density of image data of a second wavelength component and without increasing a density of image data of a third wavelength component, and

wherein the interline correction portion performs correction by processing the image data of the first and second wavelength components by the interpolation process using the image data of the third wavelength component as a reference.

20. (New) The image processing apparatus according to claim 11, wherein each of the interline correction portions produces image data for each color.

21. (New) The image processing apparatus according to claim 11, wherein the correction output portion averages the output image data for each color.